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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/022,969             | GARVEY, JOSEPH F.   |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Chih-Ching Chow        | 2122                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to Amendment filed on October 20, 2004, and Interview with Applicant on February 25, 2005.

2.  The allowed claim(s) is/are 1-10.

3.  The drawings filed on 28 February 2002 are accepted by the Examiner.

4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6.  CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.

(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1.  Notice of References Cited (PTO-892)
- 2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 12/13/2001
- 4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
- 5.  Notice of Informal Patent Application (PTO-152)
- 6.  Interview Summary (PTO-413),  
Paper No./Mail Date Fax, 2/25/2005
- 7.  Examiner's Amendment/Comment
- 8.  Examiner's Statement of Reasons for Allowance
- 9.  Other \_\_\_\_\_

ANTONY NGUYEN-BA  
PRIMARY EXAMINER

### **Examiner's Amendment and Statement of Reasons for Allowance**

1. This action is responsive to Applicant's amendment after final filed December 28, 2004 and interview with Applicant on February 25, 2005.

#### *Response to Arguments*

2. Applicant's arguments, filed concurrently with the amendment after final filed on December 28, 2004, with respect to claims 1-10 have been fully considered and are persuasive. The rejection of these claims under 35 U.S.C. § 103 as being unpatentable over the combination of Smith, Hodge, Hibdon, and Andrews' disclosures is withdrawn.

#### *Examiner's Amendment*

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Antony P. Ng, Registration Number 43427, on February 25, 2005.

The application has been amended as follows:

1. (currently amended) A method for processing macros of varying grammatical invocation by a pre-processor having a lexer, a glue routine, a macro invocation parser and a parser, said method comprising:

receiving an identifier token from source code;

in response to said received identifier token matching a macro identifier stored in a symbol table;

replacing said identifier token with a corresponding macro form token ~~corresponding to said identifier token from said symbol table~~;

sending said macro form token to said glue routine;

invoking said macro invocation parser by said glue routine;

continuously receiving transferring tokens to ~~by~~ said macros invocation parser via said glue routine until a completion of said macro invocation; and

sending a macro body definition of said macro to said lexer by said macro invocation parser.

6. (currently amended) A computer program product residing on a computer usable medium for processing macros of varying grammatical invocation by a pre-processor having a lexer, a glue routine, a macro invocation parser and a parser, said computer program product comprising:

program code means for receiving an identifier token from source code;

in response to said received identifier token matching a macro identifier stored in a symbol table;

program code means for replacing said identifier token with a corresponding macro form token ~~corresponding to said identifier token from said symbol table~~;

program code means for sending said macro form token to said glue routine;

program code means for invoking said macro invocation parser by said glue routine;

program code means for continuously receiving transferring tokens to by said macro invocation parser via said glue routine until a completion of said macro invocation; and

program code means for sending a macro body definition of said macro to said lexer by said macro invocation parser.

*Examiner's Statement of Reason(s) for Allowance*

4. Claims 1-10 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The prior arts of record: Smith, teaches a method for look up macros in a macro

table, transfer macro to predefined string, and parse ASCII strings with parser.

Hodge teaches a method of an interpreter which tokenized and parses lines of

code as they are parsed until a script stop token is detected. Hibdon teaches

replacing macro with macro body and passes the expended macro to a parser

module. And Andrews teaches a method of macro expansion or macro formal

parameter substitution. However, none of them teaches an additional layer of lexical analysis and parsing (see FIG. 3 of current invention) process; and none of them has disclosed a pre-process that includes a lexer, a glue routine, and a macro invocation parser, which will continuously receiving tokens until a completion of macro form token.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Ching Chow  
Examiner  
Art Unit 2122

CC



ANTONY NGUYEN-BA  
PRIMARY EXAMINER